SECTION 3 TECHNICAL SPECIFICATIONS

BID NO.: 7313-4/10-OTR

SCOPE

Provide video inspection services of the landfill leachate transmission and underdrain piping at four (4) Dade County Landfills: the Resources Recovery Facility (RRF), located at 6990 N.W. 97 Avenue; the North Dade Landfill (NDL), located at 21400 S.W. 47 Avenue; the South Dade Landfill (SDL), located at 23707 S.W. 97 Avenue, and the 58th Street Main Landfill located at 8831 NW 58 Street. The Four (4) Dade County Landfills will be jetted and Video taped one (1) time each year and the survey and video tape will be delivered to Miami Dade Solid Waste Management on/or before December 31 of each year.

Confined space entry (manholes), and a methane rich atmosphere in the piping systems are anticipated. The Scope of Work for all landfills (RRF, NDS, SDL) includes:

- 3.1 Prior to video inspection, all televised lines be cleared of all obstructions, blockages, or sediments through the use of high pressure water jetting.
- 3.2 Video inspection and taping of the interior of all piping systems including joints, bends, valves and manholes.
- 3.3 Delivery of (12) copies (4 complete copies for each of the four (4) landfills, (RRF, NDL, SDL), of the recorded video inspections on a VHS format. An index of the locations, on tape and in the pipe of damage or other areas of interest shall be supplied by with each VHS tape.
- 3.4 Delivery of twelve (12) copies (4 complete copies for each of each of the four (4) landfills, RRF, NDL, SDL), of written report, noting damaged areas of pipe. The corresponding location, on videotape, of damaged areas of pipe shall be stated. Other information such as date, time, length of pipeline inspected, shall be noted in the report as well.
- 3.5 Prepare twelve (12) copies (4 complete copies for each of each of the four (4) landfills, RRF, NDL, SDL), of a schematic drawing identifying the location of noted damaged.
- 3.6 The successful bidder shall supply all equipment, labor personnel trainer, supplies (including water), logists required to perform the stated service. Camera equipment, camera crawler/carrier and other related equipment which are to be used in the potentially methane rich atmosphere are to be certified as explosion proof. All equipment is to be designed for this application, as may be required in OSHA regulations. Documentation of this "explosion proof" certification shall be provided to the County prior to commencing work.
- 3.7 Completed work products (videotapes written report and sketch and sketch) are to be submitted to the County within six calendar weeks of issuance of the Notice-To-Proceed.

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- 3.8 A separate invoice is to be submitted for each landfill within thirty (30) days of the completion of work at that landfill.
- 3.9 Since the condition of piping in the landfill's underdrain if unknown, the County makes no guarantee stated or implied as to a minimum amount of feet to be video inspected and taped at each site. In addition, the County shall assume no liability due to obstructions, pipe failure or ponding water resulting in damage, submerged, or lost or stuck camera(s).

SITE DESCRIPTIONS

3.10 Resources Recovery This mono-fill landfill covers approximately 80 acres. 26.5 acres are closed and are situated in the northwest corner of the site. Twenty (20) acres in the southwest corner (Cell 17 & 18) are operating. The leachate collection system consist of a variety of pipe types including corrugated metal pipe (CMP), high density polyethylene (HDPE) pipe, ductile iron pipe (DIP), and polyvinylchloride (PVC) pipe. Some piping lines may have undergone replacement form CMP/PVC to HDPE, and may be under construction and may not be available for video inspection. The eastern transmission laterals are 8" – 12" diameter HDPE (MH 8 to MH 15) others are either PVC or CMP. The southern lateral (MH1A – 7D) is 8" – 12" HDPE and PVC. Underdrains in Cells 17 and 18 are accessed from the east by manhole and from the west by clean out ports. All underdrains and headers are not shown on the available sketch.

Resource Recovery:

Headers Longest length line segment is +/-750' with access both ends

There is heavy scale buildup in Cell 17 and consequently the header system from Cell 17 to the Pump Station. This requires specific annual maintenance to remove the scale and allow full flow.

Underdrains Longest length line segment is +/-1000' with access both ends

North Dade:

Headers Longest length line segment is +/-875' with access both ends

Underdrains Longest length line segment is +/-2000' with access one end

South Dade:

Headers Longest length line segment is +/-2000' with access both ends

Underdrains Longest length line segment is +/-2000' with access both ends

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58th Street Main Landfill

Headers Jetting 3,000 feet of header piping

North Dade Landfill The NDL covers approximately 220 acres. Video inspection work will be performed for the east cell only, which is approximately 110 acres. All underdrain and transmission piping are 8"-12" HDPE. The east cell is currently operation. Access is from the east via manholes only.

South Dade Landfill The developed portion of the SDL covers approximately 160 acres. Roughly sixty (60) acres are closed and occupy the east portion of the site (cells 1 & 2) and fifty (50) are currently in operation (Cell 3). In addition +/-50' acres are constructed and awaiting operation (Cell 4). The leachate collection system consist of a variety of pipe types and information is to be used as a guide and is to be filed verify by the vendor.

<u>Cell</u>	Pipe Locations	<u>Type</u>	Approx Length	No.	<u>Access</u>
1	East Perimeter	PVC	2000'	1	N/S manholes
2	Underdrains	PVC	2000'	3	N/S manholes
3	Underdrains	HDPE	1000'	4N	N Manholes
3	Underdrains	HDPE	1000'	4S	S Manholes
4	Underdrains	HDPE	1000'	4N	N Manholes
4	Underdrains	HDPE	1000'	4S	S Manholes
Header	Berms	PVC	8000'		Manholes
		HDPE			Life Stations

NOTE* There are a number of manholes, no run will exceed 1000 feet. The longest continuous run is 1000 feet.

58 Street Landfill The 58 Street Landfill comprises the area between NW 58th Street and NW 74th Street, NW 87th and NW 97th Avenues. This closed site extends over 400 acres north of a utility easement. There is a leachate interception trench running in a north-south direction for about 2,500 feet on the easternmost side of the site (roughly parallel to NW 87th Avenue.) This trench consists of a 6" transmission line to a lift station at the northeast corner of the landfill.